

REMARKS/ARGUMENTS

1. *Status of the Claims*

In this Amendment, claim 1 is amended. Claims 1, 4, and 7 are pending and under consideration with entry of this Amendment.

2. *Support for the Amendments*

Support for the amendments to the claims can be found throughout the specification, the drawings, and the claims as originally drafted. Support for the amendment in claim 1 can be found in, e.g., original claim 4. No new matter is introduced by this Amendment.

3. *Interview*

Applicants thank the Examiner for the helpful interview.

4. *Rejection under 35 U.S.C. § 112, first paragraph*

Claims 1, 4, and 7 were rejected under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the enablement requirement. Specifically, the Examiner argued that without access to either of the Owarihatamochi or the Nipponbare cultivars, those of skill in the art would not know what the G271 alleles of those varieties were. Since the Examiner argued that both cultivars were required for use of the claimed methods, the Examiner requested that Applicants deposit seed for the cultivars or demonstrate that they were otherwise publicly available.

Applicants respectfully traverse the rejection. Applicants respectfully submit that those of skill in the art would not need the Nipponbare cultivar, nor need to know what the G271 allele of the Nipponbare cultivar looked like, to practice the claimed methods. While the Nipponbare cultivar is used in the examples of the present patent application to exemplify the invention, any cultivar that demonstrates any polymorphism at the G271 locus compared to the Owarihatamochi cultivar can be used. It was well known at the time of the invention how to identify polymorphisms between cultivars at particular loci and therefore other cultivars aside

from Nipponbare can be used according to the methods of the invention. Accordingly, Applicants submit that there is no need to deposit or otherwise demonstrate that Nipponbare is publicly available.

With regard to the Owarihatamochi cultivar, Applicants have included a petition to suspend action in this case for at least six months to allow the Applicants to accumulate the required number of seed to deposit the Owarihatamochi cultivar per the requirements of the Budapest Treaty.

5. *Rejection under 35 U.S.C. § 112, second paragraph*

Claims 1, 4, and 7 were rejected under 35 U.S.C. § 112, second paragraph as allegedly unclear in the recitation "presence ... of the Owarihatamochi allele" The Examiner argued that the application did not describe a particular size restriction fragment that corresponded with the Owarihatamochi allele. Applicants respectfully traverse the rejection.

As described above, Applicants are in the process of depositing the Owarihatamochi cultivar per the requirements of the Budapest Treaty. Access to the Owarihatamochi cultivar allows those of skill in the art to identify restriction fragments associated with the Owarihatamochi allele of G271. Moreover, Applicants respectfully submit that the actual fragment(s) associated with the Owarihatamochi allele will vary depending on how the polymorphism is generated. For example, depending on what the restriction enzyme used to generate the polymorphism, different fragments will be observed.

Those of skill in the art would have readily understood that the presence of the Owarihatamochi allele could be readily determined using the G271 marker, which was available in the art, and the Owarihatamochi cultivar, which the applicants are in the process of depositing. In view of access to these materials, it would be clear to one of ordinary skill in the art what was intended by the phrase "presence ... of the Owarihatamochi allele" without specific reference to a particular restriction fragment.

Accordingly, Applicants request withdrawal of the rejection.

6. *Rejection under 35 U.S.C. § 102*

Claims 1 was rejected under 35 U.S.C. § 102 as allegedly anticipated by a website. Specifically, the Examiner argued that the website described detecting the Owarihatamochi allele of G271. In view of this, the Examiner argued that plants with resistance would be inherently identified by identifying G271, thereby inherently anticipating the last step of claim 1. Applicants respectfully traverse the rejection.

Amended claim 1 includes the step of detecting the presence or absence of the Owarihatamochi allele of the DNA marker G271 and determining the presence or absence of field resistance in plants comprising the Owarihatamochi allele. The second step (determining field resistance) is not inherent in the step of detecting the Owarihatamochi allele of G271. As discussed in the patent application, the G271 locus is about 5cM away from the resistance locus. *See, e.g.*, page 18, lines 9-10 of the specification. Therefore, many, but not all, plants with the Owarihatamochi allele are resistant. Therefore, to ensure that the plants are resistant, the plants must be tested for resistance. Since not all plants are resistant, the cited art cannot inherently anticipate the present claims. Accordingly, Applicants respectfully request withdrawal of the rejection.

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Amdt. dated February 20, 2004
Amendment under 37 CFR 1.116 Expedited Procedure
Examining Group

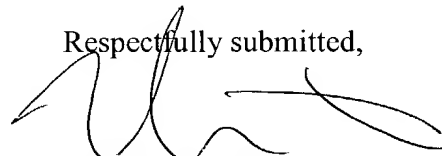
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CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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